



State of Utah

Department of
Natural Resources

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April 12, 2004

TO: File

FROM: Paul Baker, Reclamation Biologist

SUBJECT: Quarterly Meeting to Discuss Reclamation and Other Issues, Kennecott
Utah Copper, Bingham Canyon Mine, M/035/002, Salt Lake County,
Utah

Date of Meeting: March 17, 2004
Time of Meeting: 2:00 p.m.
Location of Meeting: Division of Oil, Gas and Mining Offices
Participants: Vicky Peacey and Paula Doughty, KUCC; Wayne Hedberg,
Doug Jensen, Paul Baker, Tom Munson, and Susan White,
DOGM

Purpose of Meeting: To discuss upcoming reclamation work at the Bingham
Canyon Mine, particularly with regard to the research requirements in
Kennecott's agreement with the Board of Oil, Gas and Mining.

Tailings Ponds

We first talked about reclamation of the tailings ponds. The ponds
have had mixed revegetation success. The seed mix has recently been modified to
delete some species that were not becoming established after being seeded.

The original seeding plan for the tailings ponds was to seed with an
annual grain then to come back and seed with a seed mix for establishing permanent
vegetation. Kennecott is now applying the annual grain and the permanent mix at the
same time, and Ms. Doughty and Ms. Peacey agreed to try to find why this change
was made.

Bitterroot Nurseries planted some shrubs in Booth tubes on one of the
dumps, and this planting has been fairly successful. For this reason, Kennecott
intends to have Bitterroot do some plantings on the tailings pond in 2005.

The Division expressed concern whether the embankment for the
north tailings pond was being seeded, but the Kennecott representatives said it is
being seeded periodically with annual rye.

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Kennecott is currently applying about seven tons per acre of biosolids as a soil amendment. There are a lot of complaints from the public about the smell, more, even, than about dust. [Did they say they were going to try to do something about this?]

Waste Dumps

The operator gave the Division a map showing areas where reclamation is planned for the coming year. Along the Main Mine Access Road, there is a reclaimed/revegetated area currently dominated by downy brome. The operator would like to try using the herbicide Plateau in this area. Because Plateau is most effective when there is little plant residue, it may be necessary to do a controlled burn in this area. A controlled burn would need to be done with any necessary approvals from Salt Lake County or other involved government agencies.

The map shows 120 acres where reclamation is planned for 2004. This is to be done along the Main Mine Access Road and on the north part of the Eastside Waste Disposal Area.

The Division commented that it would be good to know whether mycorrhizae have become established on any plants in the waste dumps.

Other Issues

Mr. Jensen mentioned a bioremediation treatment for plume water and suggested this could be used as one of Kennecott's experimental practices. An area of about 25-30 acres will treat 2000 gallons per minute, and sludge stays in the bioreactor.

The Butterfield Canyon long-term slope stability study is being expanded to include all the waste rock dumps.

We talked about changing the time for Kennecott's annual presentation to the Board. It might be better to do this in January rather than October.

The next meeting will be on site on May 19. We would like to look at the Butterfield Canyon dumps, the Main Mine Access Road, and Barney's Canyon.